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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,629	01/14/2004	Mark James Kline	8194C	4664

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EXAMINER

HILL, LAURA C

ART UNIT

PAPER NUMBER

3761

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/757,629	Applicant(s) KLINE ET AL.	
	Examiner Laura C. Hill	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 8-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 8-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

Applicant's arguments filed 21 March 2006 have been fully considered but they are not persuasive. Note that Applicant's amendment and newly added claims necessitated the rejection over Schmidt (US 3,797,495) in view of Vukos et al. (US Des. 422,078), and further in view of Tritsch (US 3,937,221) as discussed below.

1. In response to Applicant's arguments that 'Applicant could not identify any teaching or suggestion within Schmidt to provide a surface fastening system having different levels of resistance to disengagement in different directions' (see Remarks page 5, paragraph 5), Examiner notes that the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) as per MPEP 2144. See also *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Furthermore, Schmidt discloses pressure sensitive adhesive tapes for use with disposable diapers to insure against displacement of the tape in normal handling and which can be detached from the diaper without any damage to the tape, adhesive or diaper (column 1, lines 52-59). Thus, Schmidt clearly describes a desirable fastener tab will maintain its structural integrity as taught by Vukos and Tritsch when

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subjected to a variety of peel and shear mode forces during application of the diaper via the tab mechanism.

2. Applicant's argument that Schmidt and Vukos do not disclose or suggest a fastening system with 'different levels of resistance in different directions' as required by amended claim 1 (see Remarks page 6, paragraphs 3-6) is rendered moot by the addition of Tritsch as discussed below. However, Examiner maintains that one skilled in the art would be motivated to combine Vukos with Schmidt because Vukos would provide an easier mechanism to grip and open the tab (see page 4 Office action dated 21 December 2005) since the smooth indented edges and geometry of Vukos (see figure 1) provides a suitable landing area for finger to be placed and thus make the tab easier to grip. Furthermore, the gripping region of Vukos inherently has a free end [see figure 1] (contrary to Applicant's assertion) in order to disengage and re-engage the fastener with the absorbent article chassis to form the wearing article having a waist opening. A caregiver would inherently grip the smaller width, outside, curvilinear edges of Vukos during application since these edges are closest to the caregiver to prevent having to reach around the user during application of the article.

3. In response to Applicant's assertion that the conclusory statement is devoid of support (see Remarks page 7, paragraph 1), it is noted that the motivation to modify Schmidt may come from three sources as per MPEP 2144 and in the law as follows: the rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art,

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established scientific principles, or legal precedent established by prior case law. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992) as per MPEP 2144. See also *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). Thus, none of the references have to explicitly state the problem to be solved. However, assuming Applicant's assertion that Schmidt and/or Vukos have to explicitly state the problem, the geometrical shape of Vukos is an improvement over the rectangular fastening tab of Schmidt for improved gripping as discussed in the preceding paragraph.

4. Applicant's arguments that 'Tritsch does not disclose different peak peel load values as claimed' (see Remarks page 8, paragraph 6), is rendered moot in view of the discussion with respect to claim 11 below. Furthermore, since the fastener of Tritsch is easier to remove once it has already been partially removed and since no criticality of these values is provided, when the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02.

5. In response to Applicant's arguments that there is no motivation to combine Tritsch with Schmidh and Vukos (see Remarks page 9, paragraphs 1-2), Examiner maintains there is a motivation to combine as per the discussion below with respect to claim 1. Furthermore, in response to Applicant's arguments that the 'use of Tritsch's release string would cause substantial sheer forces at the stepped distal end of Vukos'

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fastener' (see Remarks page 9, paragraph 4), Examiner points out that assuming *arguendo* Applicant's assertion were true, it has been held that one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references. *In re Keller*, 208 USPQ 871 (CCPA 1981).

Moreover, it has been held that the test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in the pertinent art. *In re Bozek*, 163 USPQ 545 (CCPA 1969). See also *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In addition, it is noted that contrary to Applicant's assertions (see Remarks page 9, paragraph 5), Examiner has stated the purpose of modifying Schmidt is for facilitating fastener release *in addition to* a fastener that can withstand various forces *in different directions* during use.

Claim Rejections - 35 USC § 103

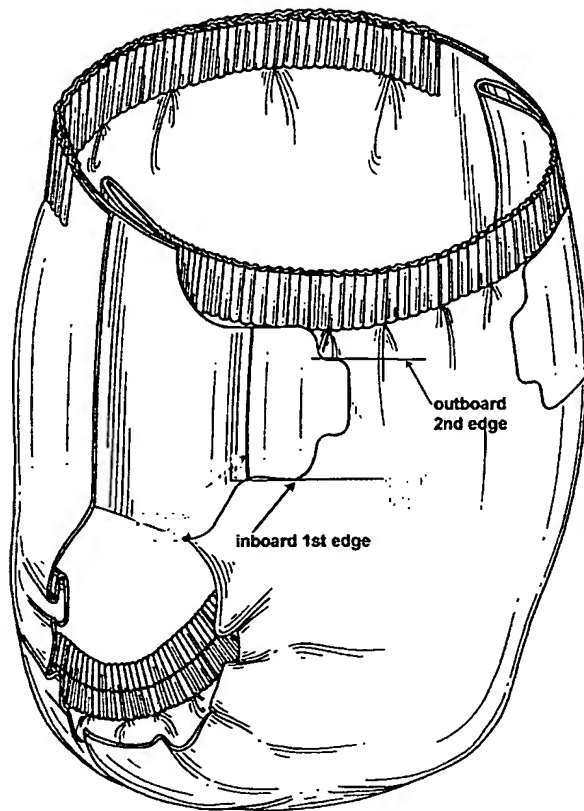
The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 4-5, 8-10 and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (US 3,797,495 herein 'Schmidt') in view of Vukos et al. (US Des. 422,078 herein 'Vukos'), and further in view of Tritsch (US 3,937,221; herein 'Tritsch'). Regarding claims 1, 4, 8-9, 11, and 16-19 Schmidt discloses a diaper 20 with absorbent pad/chassis 22 to be worn about a wearer (column 6, lines 39-43 and figure 2) comprising: a surface fastening system 28 with first tape base/fastening element 12 and protective cover strip/second facing fastening element 30, the surface fastening

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system 28 including an effective Y dimension substantially parallel to the longitudinal article axis (column 6, lines 63-68, figure 3), wherein the backing tape used in surface fastening system 28 is able to withstand different tear and tensile forces applied across the tape in varying directions and degrees when user moves (column 2, lines 1-11).

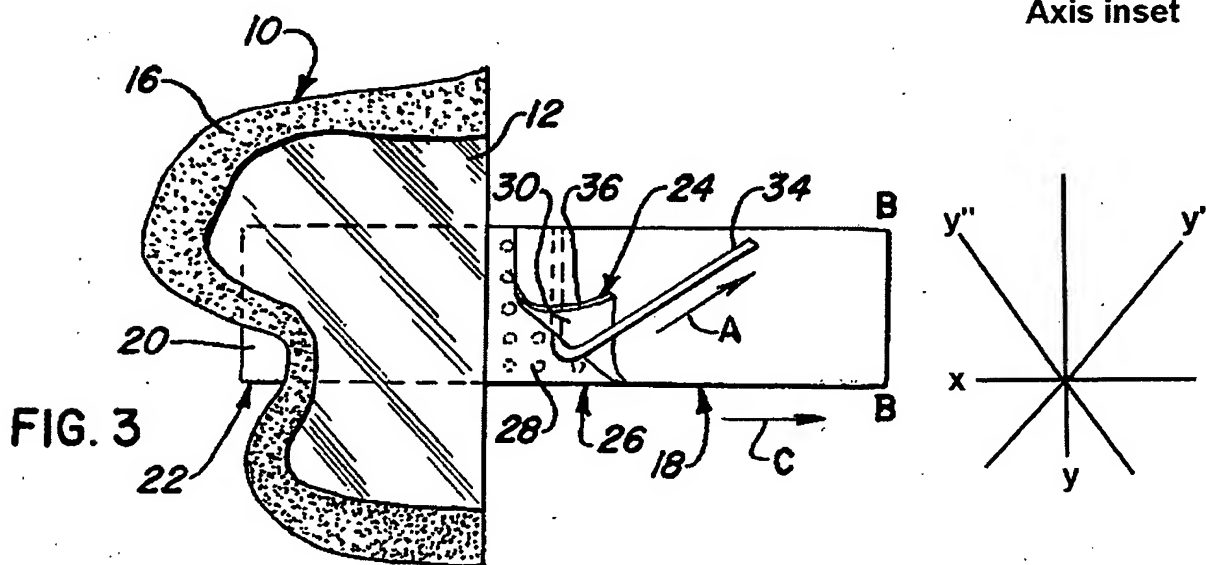
Schmidt *does not expressly disclose* the fastening system itself is resistant to different levels of resistance in different directions or a Y dimension increasing from a distal to proximal edge of the first fastening system. **Vukos** discloses disposable absorbent article to be worn about a user with a Y dimension increasing from a distal to proximal edge having a first longitudinally inboard edge longer than a second longitudinally outboard edge and an overall tab fastener curvilinear configuration capable of being gripped more easily by a caregiver or user (figure 1). If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

**FIG. 1**

One would be motivated to modify the fastening system of Schmidt with the increasing Y-dimension and curvilinear edges of Vukos since doing so would provide an easier mechanism to grip and open the tab and since both references disclose wearing articles with fastening systems for fastening about the waist of a user. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the fastening system, thus providing a fastening system with an increasing Y-dimension from the distal to proximal edge.

Schmidt/Vukos *do not expressly disclose* the fastening system has different levels of resistance in different directions from the engaged to disengaged configuration. Tritsch discloses diaper 10 with tab 18 having separator string 34, where separation is

effected by grasping the protruding portion of string 34 and peeling end portion 24 away from central portion 26 in the diagonal direction of arrow A (i.e.: in a plane non-parallel to the xz-plane/first peel load), thereby lifting up one corner of the folded-over end portion 24 (column 3, line 8, column 4, lines 38-40, column 5, lines 1-6 and figure 3). Tritsch further discloses the user is then able to grasp free end 24 of tab 18 near end border 36 and pull in a direction indicated by arrow C (in a plane parallel to the xz-plane/second peel load). Since the user must pull in a plane non-parallel to the xz-plane/first peel load first as indicated by arrow A to be able to subsequently pull in a plane parallel to the xz-plane/second peel load as indicated by arrow C, the first diagonal and curvilinear peel load required to start the tab lifting action is greater than the second parallel peel load.



One would be motivated to modify the curvilinear pressure sensitive adhesive fastener of Schmidt/Vukos with the pressure sensitive adhesive mulit-directional resistance to

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force in different direction fastener of Trisch for improved fastener stability in relation to the article during forces generated by the wearer during use since the references are in the same field of endeavor; disposable absorbent wearing articles having pressure-sensitive adhesive fastening means around a wearer's waist. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the fasteners, thus providing a fastener with resistance to peel force in different directions.

Alternatively, the peak peel load value from the $y'z$ plane through the $y''z$ plane will inherently be greater than the second peak peel load value in the xz plane since it takes more force and inertia to begin disengagement of the fastener by pulling in a non-linear diagonal and sideways motion such as from the $y'z$ through the $y''z$ planes than it does to pull entirely in an upward and "out-of the page" xz plane direction in a shear mode fashion after pulling has begun on the fastener (see also Applicant's own admission to this point on page 14, lines 4-6 of the instant Specification).

Regarding claim 5 Schmidt/Vukos further disclose protective cover strip/second facing fastening element 30 having a portion of the lower edge being unjoined or at least partially detached from the underlying structure (figure 3).

Regarding claim 10 Vukos further discloses the disposable absorbent article with first and second fastening elements attached to form a waist opening and a pair of leg openings (figures 1 and 4).

Regarding claims 12-15 Schmidt/Vukos/Tritsch do not expressly disclose peak peel load or plane projection angle values. Peak peel load and plane projection angles

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are result effective variables because it is well known to those of ordinary skill in the art that they are at a result of the size of the fastening system and article and inherently dependent on the user's force applied from engagement to the disengagement period that will vary amongst users. Furthermore, by Applicant's own admission, peak peel load is a result effective variable since it is dependent on the angle alpha exerted during peeling (see page 15, lines 9-16 of the instant Specification). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Schmidt/Vukos/Tritsch with peak peel load and plane projection angles since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

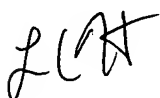
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura C. Hill
Examiner
Art Unit 3761

LCH



TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

